Complete Summary

TITLE

Coronary artery disease: percentage of members who have optimally managed modifiable risk factors (LDL, tobacco non-use, blood pressure control, aspirin usage).

SOURCE(S)

HealthPartners. Clinical indicators report: 2002 results. Bloomington (MN): HealthPartners, Inc.; 2003 Oct 1. 52 p.

Brief Abstract

DESCRIPTION

This measure assesses the percentage of members with a diagnosis of coronary artery disease (CAD) age 18 through 75 who have optimally treated modifiable cardiovascular risk factors.

RATIONALE

Since 1900, cardiovascular disease (CVD) has been the leading cause of death in the United States every year but 1918. Approximately one in five individuals has some form of CVD, and CVD claimed 1 of every 2.5 deaths in the United States in 2000. Improved compliance with current evidence-based treatment recommendations results in decreased morbidity and mortality from coronary artery disease (CAD).

PRIMARY CLINICAL COMPONENT

Coronary artery disease (CAD); low-density lipoprotein (LDL); lipid medication; tobacco; blood pressure; aspirin

DENOMINATOR DESCRIPTION

Members between 18 and 75 years of age as of December 31st of the reporting year, who were continually enrolled with not more than 1 month break in coverage and have a diagnosis of coronary artery disease (CAD) (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

The number of members from the denominator who reach treatment targets for all clinical components (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

PRIMARY MEASURE DOMAIN

Outcome

SECONDARY MEASURE DOMAIN

Process

EVIDENCE SUPPORTING THE MEASURE

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- Lipid management in adults.

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance

EVIDENCE SUPPORTING NEED FOR THE MEASURE

HealthPartners. Clinical indicators report: 2002 results. Bloomington (MN): HealthPartners, Inc.; 2003 Oct 1. 52 p.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses
Dietitians
Nurses
Physician Assistants
Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

TARGET POPULATION AGE

Age 18 to 75 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Cardiovascular diseases (CVD) are the number one killer of women and men. There are 17,000 HealthPartners members with coronary artery disease (CAD) which represents 2.6% of the overall population.

EVIDENCE FOR INCIDENCE/PREVALENCE

American Heart Association. Heart disease and stroke statistics - 2003 update. Dallas (TX): American Heart Association; 2002. 46 p.

Institute for Clinical Systems Improvement (ICSI). Stable coronary artery disease. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 Nov. 42 p. [75 references]

ASSOCIATION WITH VULNERABLE POPULATIONS

Coronary heart disease (CHD) rates in women after menopause are 2-3 times those of women the same age before menopause. Prevalence of CHD is higher among African Americans, Native Americans, Asians and Hispanics than among Caucasians.

EVIDENCE FOR ASSOCIATION WITH VULNERABLE POPULATIONS

American Heart Association. Heart disease and stroke statistics - 2003 update. Dallas (TX): American Heart Association; 2002. 46 p.

BURDEN OF ILLNESS

Unspecified

UTILIZATION

From 1979 to 2000 the number of Americans discharged from short-stay hospitals with coronary heart disease (CHD) as the primary diagnosis increased 17.7%.

EVIDENCE FOR UTILIZATION

American Heart Association. Heart disease and stroke statistics - 2003 update. Dallas (TX): American Heart Association; 2002. 46 p.

COSTS

In 1998, $10.6 billion was paid to Medicare beneficiaries for coronary heart disease (CHD) ($10,428 per discharge for acute myocardial infarction [MI]; $11,399 per discharge for coronary atherosclerosis; and $3,617 per discharge for other CHD).

Annual expenditure for health and lost productivity due to cardiovascular diseases (CVD) cost the nation billions of dollars. CHD is the leading cause of premature, permanent disability in the U.S. labor force, accounting for 19% of disability allowances by the Social Security Administration.

EVIDENCE FOR COSTS

American Heart Association. Heart disease and stroke statistics - 2003 update. Dallas (TX): American Heart Association; 2002. 46 p.

Morbidity & Mortality: 2002 chart book on cardiovascular, lung, and blood diseases. Bethesda (MD): National Heart, Lung, and Blood Institute (NHLBI), National Institutes of Health (NIH); 2002 May. 104 p.

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Members between 18 and 75 years of age as of December 31st of the reporting year who were continuously enrolled within the health plan for one year as of December 31st, with not more than 1 month break in coverage who had a visit with a coronary artery disease (CAD) diagnosis between December 31st of the reporting year and January 1st of the prior year

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions
Members between 18 and 75 years of age as of December 31st of the reporting year, who were continually enrolled with not more than 1 month break in coverage and have a diagnosis of coronary artery disease (CAD)*

*CAD diagnosis:

410.XX	Acute Myocardial Infarction (AMI)
411.XX	Post Myocardial Infarction Syndrome
412	Old AMI
413.XX	Angina Pectoris
414.0X	Coronary Atherosclerosis
414.10	Aneurysm of Heart Wall
414.8	Other Chronic Ischemic Heart Disease (IHD)
414.9	Chronic IHD

Exclusions
Members can be validly excluded from the sample for the following reasons during the measurement year: member died, resident in nursing home, or hospice. Sampling error member does not have CAD.

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

All members from the denominator who reach treatment targets* for all numerator components:

- Low-Density Lipoprotein (LDL) Screening--Coronary artery disease (CAD) population who had an LDL during the measurement year or the year prior to the measurement year with a level less than 100 for the most recent screening
- Tobacco Non-User--CAD population with documented non-smoking status
- Blood Pressure Control--CAD population whose blood pressure is in control less than 140/90 during the measurement year
- Aspirin Usage--CAD population eligible for aspirin use who were on aspirin therapy.

*Numerator component target measure may be modified to reflect changing recommendations of treatment targets.

Exclusions

Members contraindicated to aspirin therapy are excluded from the "Aspirin Usage" component of the measure.

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative and medical records data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

OUTCOME TYPE

Clinical Outcome

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison
Prescriptive standard

PRESCRIPTIVE STANDARD

Members reaching treatment target for all risk factors. 2002 medical group benchmark is 51%. Goal 60% (Goal 60% in 2003 based on assessment against earlier treatment parameters of low-density lipoprotein cholesterol [LDL-Chol] less than 130, blood pressure [BP] less than 140/90 age less than or equal to 60, less than 160/90 age greater than 60. Goal 40% in 2004 based on treatment parameters listed in current measure.)

EVIDENCE FOR PRESCRIPTIVE STANDARD

HealthPartners. Clinical indicators report: 2002 results. Bloomington (MN): HealthPartners, Inc.; 2003 Oct 1. 52 p.

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

This measure has been used to report medical group and health plan performance for four years. Data accuracy has been verified by medical group and health plan personnel over that period when data were challenged.

EVIDENCE FOR RELIABILITY/VALIDITY TESTING

Institute for Clinical Systems Improvement (ICSI). Lipid management in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 Jul. Discussion and references. p. 34-61.

Institute for Clinical Systems Improvement (ICSI). Stable coronary artery disease. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 Nov. Discussion and references. p. 19-35.

Identifying Information

ORIGINAL TITLE

Optimal coronary artery disease care.

MEASURE COLLECTION

HealthPartners Clinical Indicators

MEASURE SET NAME

Heart Health (HealthPartners Clinical Indicators)

DEVELOPER

HealthPartners

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2001 Oct

REVISION DATE

2003 Oct

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

HealthPartners. Clinical indicators report: 2002 results. Bloomington (MN): HealthPartners, Inc.; 2003 Oct 1. 52 p.

MEASURE AVAILABILITY

The individual measure, "Optimal Coronary Artery Disease Care," is published in the "Clinical Indicators Report, 2002 Results." This document is available in Portable Document Format (PDF) from the HealthPartners Web site.

For print copies of the Clinical Indicators Report, 2002 Results, please contact HealthPartners Performance Measurement and Improvement Department at (952) 883-5777; Web site: www.healthpartners.com.

COMPANION DOCUMENTS

The following is available:

- Institute for Clinical Systems Improvement (ICSI). Stable coronary artery disease. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 Nov. 43 p. This document is available from the Institute for Clinical Systems Improvement (ICSI) Web site.
- Institute for Clinical Systems Improvement (ICSI). Lipid management in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 Jul. 72 p. This document is available from the ICSI Web site.

NQMC STATUS

This NQMC summary was completed by ECRI on May 6, 2004. The information was verified by the measure developer on June 18, 2004.

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